



May 26, 1999

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DIV. OF OIL, GAS & MINI

Utah Coal Program Utah Division of Oil, Gas, and Mining 1594 West North Temple, Suite 1210 P.O. Box 145801 Salt Lake City, Utah 84114-5801

Attn:

Daron Haddock

AMAAC

Re: Amendment to Revise Deer Creek Reclamation Plan, PacifiCorp, Deer Creek Mine, ACT/015/018, Emery County, Utah.

PacifiCorp, by and through its wholly-owned subsidiary, Energy West Mining Company ("Energy West") as mine operator, hereby submits an amendment to revise the Deer Creek reclamation plan.

In the letter dated July 16, 1998, the Division requested Energy West to conduct a mid-term review on its Deer Creek Mining and Reclamation Plan (MRP) encompassing the following items.

- ❖ An AVS check to ensure that Ownership and Control information is current and correct.
- A review of the bond to ensure that it is in order and that the cost estimate is accurate and is escalated to the appropriate year dollars.
- ❖ A review of the Plan to ensure that the requirements of all permit conditions, division orders, notices of violation, abatement plans, and permittee-initiated Plan changes are appropriately incorporated into the Plan document.
- ❖ A review of the Plan to correct the deficiencies associated with highwall elimination.

In response, Energy West submitted the requested review items of the Deer Creek MRP on August 7, 1998. All the above items were addressed, including highwall elimination and bond calculations. On September 14, 1998, the Division completed their review process of the Deer Creek Mine, but required Energy West to file an amendment to include highwall elimination as part of the Deer Creek Mine reclamation plan. This amendment was to be submitted by October 13, 1998.

05/25/99

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After reviewing the reclamation plan, it was found that the plan was deficient of cut and fill calculations and impossible to justify highwall elimination. Therefore, Energy West submitted a request to extend the period to incorporate highwall elimination as part of the Deer Creek MRP until June 1, 1999. During this time Energy West committed to completely revise the Deer Creek reclamation plan to submit the best possible reclamation plan with the most accurate and up to date information. This information has been compiled and is incorporated into the revised Deer Creek reclamation plan (see enclosed material). The following discusses the changes made to the Deer Creek reclamation plan. The plan was formatted to follow more closely the outline of the R645 regulations. No redlining was used in this submittal since the plan was completely redeveloped. Strikeouts are discussed later.

R645-301-200: All pertinent information to soils was incorporated in this section including a

summary of the reclamation contouring techniques and soil characteristics of the

disturbed area.

R645-301-300: In cooperation with Division reclamation specialist, Paul Baker, the seed mixtures

and containerized plantings have been revised to better reflect the diversity and

suitability of plant species at the Deer Creek Mine.

The reclamation schedule has been revised to include sediment pond removal. Pond removal will occur after all other reclamation has been performed upstream

of the pond.

Site monitoring during the 10 year responsibility period has been revised to include mine water discharge. Mine water discharge will be sampled quarterly for the first two years after mine cessation and annually thereafter, until final

bond release.

R645-301-400: No changes, with the exception to formatting, were made to the Land Use and Air

Quality section.

R645-301-500: The Engineering Section has numerous changes. The number of portals of the

Deer Creek Mine have been increased by four. Two additional portals are identified in the Deer Creek Canyon as being seal and backfilled. The two portals in Rilda Canyon are also included in this section. The Rilda Canyon reclamation

plan will remain as a separate section in the Deer Creek MRP.

The permanent mine discharge in Meetinghouse Canyon has been relocated to a Deer Creek Canyon portal. Further investigations revealed that the elevation at the intake portals in Deer Creek Canyon is lower than the Meetinghouse Canyon Utah Coal Program
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portals. A design for the mine discharge is included on a modified reclamation drawing (Drawing DS-1780-D).

A major change in the Engineering Section of the reclamation plan occurs due to the relocation of the Deer Creek channel through the mine site. The channel was moved because of both economic and practicality reasons. The previous plan called for two rip-rapped channel systems: disturbed and undisturbed. The disturbed channel system proposes to route runoff from the reclaimed site into the sediment pond. The undisturbed channel is planned to route runoff around the sediment pond. A channel will need to be constructed in bedrock for approximately 200 feet and affect undisturbed areas of the permit area. This plan appears unconventional, unnatural and expensive.

The revised route of the channel follows the natural drainage of the canyon. The disturbed area in the canyon will be re-contoured to blend in with the reclaimed channel and the undisturbed areas. Revisions to reclamation maps are shown below.

Also included in the Engineering Section is the reclamation plan along the C2 beltline. The existing plan does not address this area. The proposed reclamation plan provides a typical cross-section demonstrating before and after reclamation topography.

R645-301-600: N/A

R645-301-700:

The channel design in the existing plan is developed for a 100 year, 24 hour event. This design greatly exceeds the requirements of the Utah Coal Rules. Therefore, the Deer Creek Canyon, Deer Canyon and Elk Canyon channels will be reconstructed utilizing a rip-rapped trapezoidal channel design of sufficient size to accommodate a 100 year, 6 hour storm event as required by R645-301-742.320 of the Utah Coal Rules.

To accomplish the design criteria in the revised reclamation plan, a new storm hydrograph was developed using STORM[®]. The results were use to model a channel to accommodate peak flows from the designed storm.

Wildlife habitat enhancement was included in the revised reclamation plan through the incorporation of pools in the designed channels. These pools will be constructed to retain runoff from storm events, which will provide water sources to wildlife in the area of the Deer Creek Mine. Utah Coal Program Revision to Deer Creek Reclamation Plan Page 4 of 6

A groundwater diversion structure (french drain) is included in the revised plan that is not included in the existing plan. A groundwater source occurs above the Deer Creek Mine fan pad within the reclamation area. A typical design of the french drain is outlined on the hydrology map (Drawing DS-1780-D).

Another major change in the Deer Creek reclamation plan is the removal of the sediment pond in the initial reclamation operations. Using deep gouging techniques, precipitation is trapped within the gouges and infiltrates into the soil. Erosion will be minimal to non-existent and contributions of sediment beyond background levels are not expected to contribute suspended solids and sediment to receiving streams. All siltation structures (fences, traps, etc.) will be removed as reclamation activities are completed.

R645-301-800:

Bond calculations are not included with this submittal of the revised Deer Creek Mine reclamation plan. When the plan is approved by the Division, reclamation costs will be calculated and submitted in a timely manner. The current reclamation cost estimate for the Deer Creek Mine is \$2,283,716.00 (1999 dollars). The Deer Creek Mine carries a reclamation bond of \$2,500,000.00.

Revisions to the existing MRP are as follows:

Volume 2: Part 4, Reclamation Section, Pages 4-1 thru 4-54 (**Remove**). Retain 4-54.1 thru 4-54.13 as these pages refer to the Rilda Canyon reclamation plan. This plan will become a separate section after approval.

Part 4, Reclamation Section, Pages 4-55 thru 4-56 (Remove).

Part 4, Reclamation Section, Pages 4-66 thru 4-67 (Remove strikeout).

Volume 3: Appendix IX (Remove all references to channel design).

Volume 6: Drawing CM-10545-DR, Final Reclamation, 1-3 of 3, Plate 4-1 (**Remove**).

Drawing CM-10548-DR, Revegetation Location Map, 1 of 1, Plate 4-2 (Remove).

Drawing CM-10483-DR, Disturbed Mine Plan Area – Cross-Sections, 1 of 1, Plate 4-3 (**Remove**).

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Volume 6 con't:

Drawing CM-10551-DR, Final Reclamation – Backfilling and Grading Cross-Sections, 1-3 of 3, Plate 4-4, (**Remove**).

The following drawings will be added to Volume 2, Part 4, Reclamation Plan, Appendices:

Drawing DS-1780-D, Deer Creek, Deer, Elk Canyons – Final Reclamation Hydrology Map, 1 of 1, (Add to Appendix 7-B).

Drawing DS-1781-D, Sequence of Reclamation, 1 of 1, (Add to Appendix 5-A).

Drawing DS-1782-D, Disturbed Area – Final Reclamation Contour Map, 1 of 1, (Add to Appendix 5-C).

Drawing DS-1783-D, Deer Creek Canyon – Final Reclamation Cross-Sections, 1-2 of 2, (Add to Appendix 5-C).

Drawing DS-1784-D, Elk Canyon, Deer Canyon, and Coal Bin – Final Reclamation, 1 of 1, (Add to Appendix 5-C).

Drawing CM-10529-EM, Deer Creek, Wilberg, DesBeeDove Mines - Hydrologic Area Drainage Map, 1 of 1, (Remove from Volume 3, Appendix IX and replace in Vol. 2, Part 4, Reclamation Plan, R645-301-700, Appendix 7-B).

Based on extensive research conducted by Energy West, all criteria essential to the success of reclamation at the Deer Creek Mine have been included in the revised plan. Numerous hours have been contributed to insure that all data and information is accurate.

The Division should understand that this document is a submittal of a totally revised reclamation plan for the Deer Creek Mine. The existing MRP has parts within various sections that refer to the reclamation plan. Energy West commits to rewriting the Deer Creek MRP and electronically formatting it to follow the R645 regulations.

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Attached is three copies of the revised reclamation plan of the Deer Creek Mine. If you have any questions or concerns regarding this revision to the Deer Creek reclamation plan, please feel free to contact myself at (435) 687-4720 or Dennis Oakley at (435) 687-4825.

Sincerely,

Chuck Semborski

Geology/Permitting Supervisor

Enclosures

DCO/dco/cas

Cc Carl Pollastro, EWMC (w/o encl.)
Blake Webster, IMC (w/o encl.)
Pete Hess, DOGM (w/encl.)
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